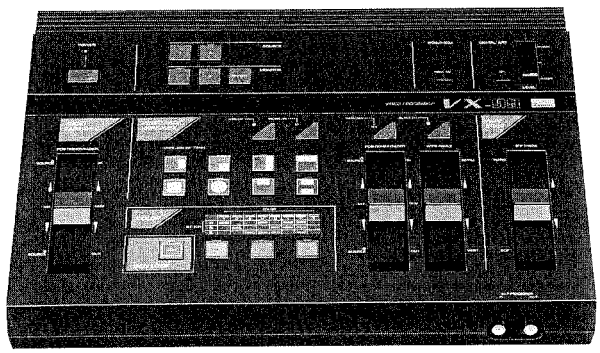
V11282

VX-99

PAL

OPERATING INSTRUCTIONS
MANUAL DE INSTRUCCIONES
BETRIEBSANLEITUNG
BRUKSANVISNING



Sansui

ENGLISH

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WARNING: To prevent fire or shock hazard, do not expose this appliance to rain or moisture.

- The Model No. and Serial No. of your unit are shown on its back panel.
- SANSUI attests that this product conforms with EEC directive 82/499/EEC.

ESPAÑOL

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AVISO: Para evitar incendios y descargas eléctricas, no exponer este aparato a la lluvia ni a la humedad.

- El Nº de modelo y el Nº de serie de este aparato están impresos en el panel posterior.
- SANSUI garantiza que este producto está conforme con las directrices de EEC 82/499.

DEUTSCH

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WARNUNG: Setzen Sie dieses Gerät zur Verhütung von Feuer- und Stromschlaggefahr weder Regen noch Feuchtigkeit aus.

- Die Modell- und die Seriennummer Ihres Gerätes sind auf der Geräterückseite angegeben.
- SANSUI weist aus, daß dieses Produkt gemäß der EWG-Vorschrift 82/499 gebaut ist.

SVENSKA

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45 ~ 58

VARNING: För att förhindra risk för brand och stötar, skall apparaten inte utsättas för regn eller fukt.

- Apparatens modellnummer och serienummer finns på baksidan.
- SANSUI garanterar att denna apparat uppfyller normerna i EEC-direktiv 82/499.

Thank you for purchasing this fine SANSUI product. Taking the time to read these operating instructions carefully before use will acquaint you fully with all its features and help ensure optimum performance.

*** In order to simplify the explanation illustrations may sometimes differ from the originals.**

Precautions

*** Bear in mind the following points.**

Power plug

When disconnecting the power cord from the power outlet, always take hold of the plug, and not the wire, and pull free. Never connect or disconnect the power plug with wet hands since you may receive an electric shock.

* Remember to disconnect the power plug from the power outlet when you do not intend to use the unit for a prolonged period of time.

Do not remove the case and bottom panel

Any inspections or adjustments inside the unit may lead to malfunctions and electric shocks. Do not touch any of the inside parts. SANSUI's warranty is not effective if a deterioration in the unit's performance results from remodeling inside.

Installation precautions

Do not install the unit in any of the following locations since this may result in a deterioration in performance or malfunction:

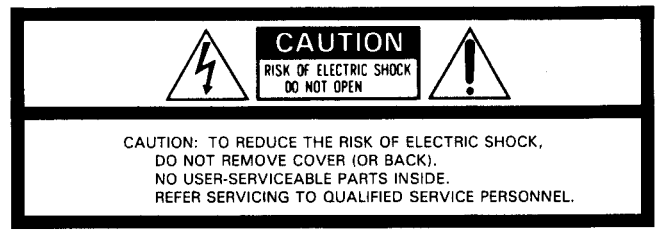
* Locations exposed to direct sunlight or near objects radiating heat such as heating appliances.
* Locations exposed to moisture or humidity.
* Locations with poor ventilation exposed to dust and dirt.
* Locations which are unstable and not perfectly flat or which are susceptible to vibration.
* On top of a high power output amplifier, audio components or any other product which radiates heat.

Do not wipe with thinners

Wipe the panels and case from time to time with a soft cloth. Using any kind of thinner, alcohol or volatile liquid will mar the surface, cause blotching on the exterior and erase the markings and should therefore be avoided.
Do not use insecticide sprays in the vicinity.

Note to CATV system installer:

This reminder is provided to call the CATV system installer's attention to Article 820-22 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.


CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

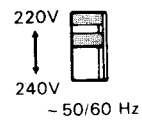
The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Before connecting the power plug

Before connecting the power plug to an electrical outlet, check to be sure that the unit is set to the proper voltage for your area. If the voltage of the unit is improperly set, fire hazard or damage to the unit may result.

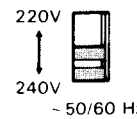
- **Units with 220V/240V VOLTAGE SELECTOR switch at rear panel**
  These units are set at either 220V or 240V with the VOLTAGE SELECTOR switch. To change the voltage, use a minus screwdriver or similar device to slide the switch.

VOLTAGE SELECTOR



At 220V

VOLTAGE SELECTOR



At 240V

ENGLISH

Connections

Refer to page 5 connection diagram as you read the following.

Connection precautions

* When connecting, either disconnect the power plug from the power outlet or turn off the unit's power using the POWER switch.
* Before connecting, read through the Operating Instructions of the other components which will be connected to this unit.
* Insert the plugs securely. Improper connection can lead to the generation of noise.
* When a pin plug is connected to the video input terminal or the audio input terminals of some types of VCR, the signals from the television tuner contained in the VCR may sometimes be automatically cut off, preventing the television program from being recorded.
  For details, read the instruction manual of the VCR.

SOURCE-A IN terminals/SOURCE-B IN terminals

The A and B terminals can be used to connect two VCRs or VDPs for playback. Connect them to the VIDEO/AUDIO output terminals on the VCR or VDP.

REC OUT terminals

These are connected to the VIDEO/AUDIO input terminals on the VCR.

* It is not possible to use these terminals simultaneously with the SOURCE-IN terminals. Be sure to use only one terminal at a time.

MONITOR OUT terminals

These are connected to the VIDEO/AUDIO input terminals on the video monitor.

LOOP OUT terminal

Two pictures can be mixed when this terminal is connected to a time base corrector (TBC) or professional-use video camera equipped with a gen-lock function. (Refer to page 14.)

For the United Kingdom only

Important

The wires in this mains lead are coloured in accordance with the following code:

Blue: **Neutral**
Brown: **Live**

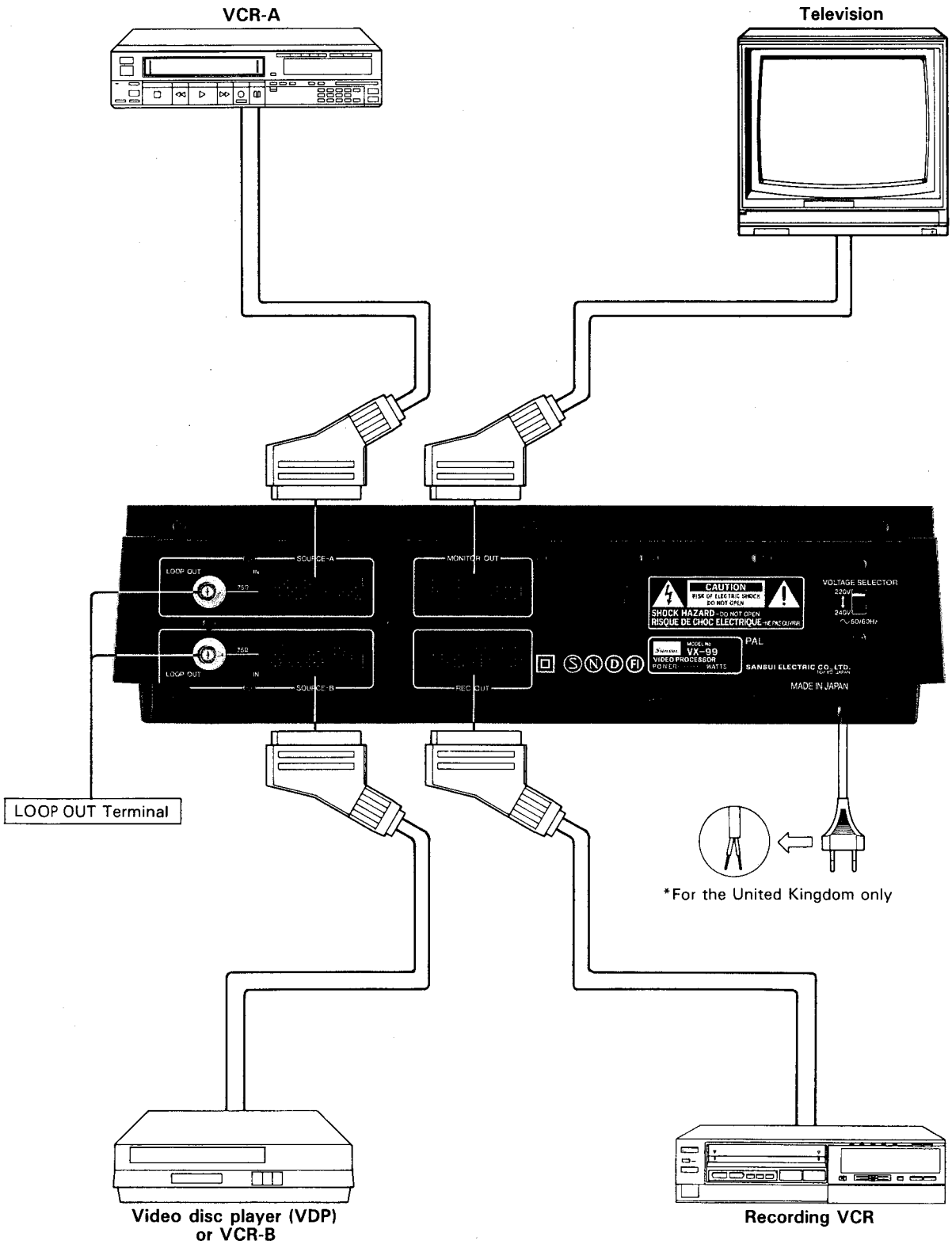
If the colours of the wires in the mains lead of this equipment should not correspond to the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured **blue** must be connected to the terminal which is marked with the letter 'N' or coloured black.

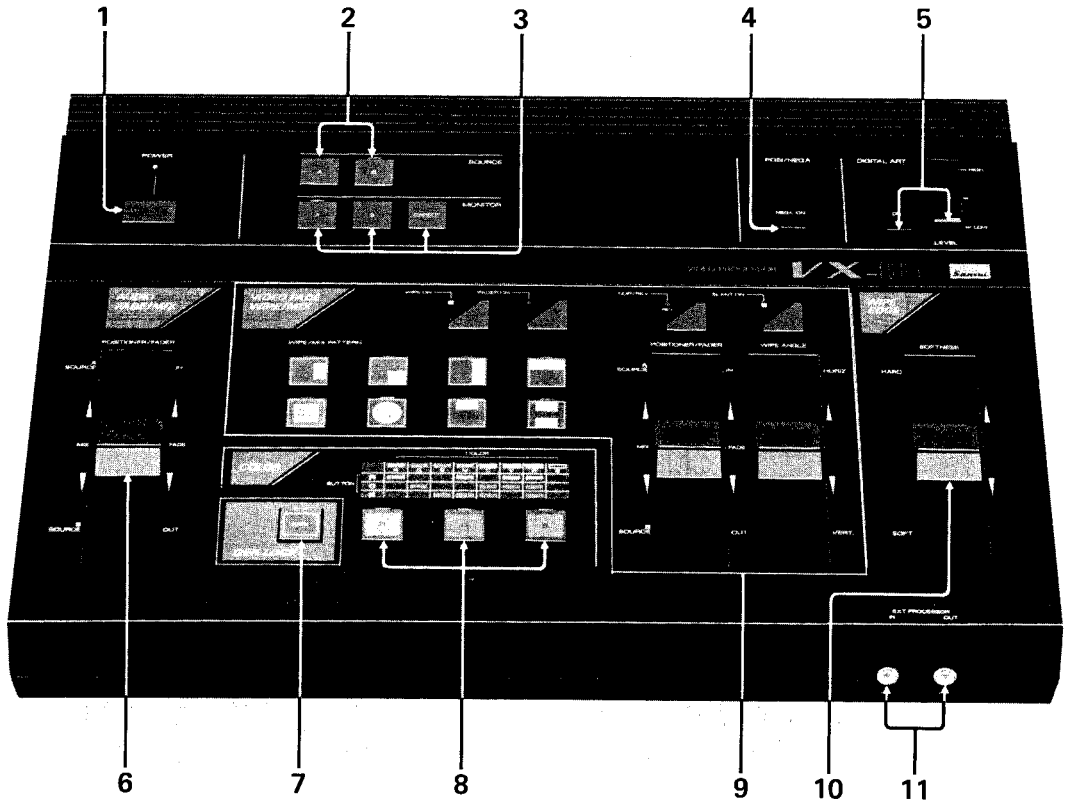
The wire which is coloured **brown** must be connected to the terminal which is marked with the letter 'L' or coloured red.

Ensure that your equipment is connected correctly. If you are in any doubt, consult a qualified electrician.

For equipment purchased outside the U.K. with a **"EUROPEAN"** two-pin mains plug, the plug should be removed and connections made in accordance with the above instructions. Ensure also that the equipment is properly adjusted to 240 volts operation. If you are in any doubt, consult a qualified electrician, or our Service Agent in the U.K.


VCR-A
Television
SOURCE-A
MONITOR OUT
LOOP OUT
IN
75Ω
CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
SHOCK HAZARD-DO NOT OPEN
RISQUE DE CHOC ELECTRIQUE-NE PAS OUVRIR
VOLTAGE SELECTOR
220V
240V
50/60Hz
PAL
VX-99
VIDEO PROCESSOR
SANSUI ELECTRIC CO., LTD.
MADE IN JAPAN
SOURCE-B
REC OUT
LOOP OUT Terminal
*For the United Kingdom only
Video disc player (VDP)
or VCR-B
Recording VCR

Panel information



1 POWER Switch
When this switch is pressed, power to the unit is turned ON, and the upper indicator lights. When pressed and released once more, power is turned off.

2 SOURCE Selector Switches
These switches are used to select the program source (SOURCE-A or B) which is to be played back.
When a switch is pressed, the corresponding indicator lights.

A Switch: Press this switch for playback on the VCR-A which is connected to the SOURCE-A terminals.

B Switch: Press this switch for playback on the VCR-B which is connected to the SOURCE-B terminals.

* The "A" switch is set when the unit's power is turned on.

3 MONITOR Switches
These switches are used to select the sound and picture to be monitored on the video monitor. When any of these switches is pressed, the corresponding indicator will light.

A Switch: Press this switch to monitor the picture without any of the VCA-A effects added.

B Switch: Press this switch to monitor the picture without any of the VCA-B effects added.

EFFECT Switch: Press this switch to monitor the picture containing the effects added by this unit. The picture of the program source selected by the SOURCE selector switch can now be monitored.

* The "EFFECT" switch is set when the unit's power is turned on. Keep it at this position for normal use.

4 POSI/NEGA Switch
When this switch is pressed, the indicator lights and the positive picture is reversed into a negative picture. When it is pressed again, the function is released and the normal positive picture is restored. A great deal of fun can be had with the fantastic pictures produced when this switch is used together with the digital art function.

5 DIGITAL ART Switch/LEVEL Control
The digital art function allows original images to be changed into pictures resembling oil paintings.

DIGITAL ART Switch: When this switch is pressed, the indicator lights, the digital art function is readied for use and the pictures are processed digitally.
When it is pressed again, the function is released and the indicator goes off.

LEVEL Control: When the DIGITAL ART switch is pressed and the indicator lights and when this control is adjusted, the digital processing level can be adjusted from low to high.

6 POSITIONER/FADER Control (AUDIO FADE/MIX)
When this control is slid from the top to bottom position, the sound can be gradually faded out; when it is slid from bottom to top, the sound can be gradually faded in.
When VCR-A and B are to be operated at the same time, slide this control from top to bottom. The VCR-A and B sound will first be mixed and then it will be possible to switch over to the sound of B.

* Normally, this control is kept at its top position.

7 MIX Switch (GEN LOCK)
Press this switch when a camera provided with a gen-lock function is connected and when two pictures are to be mixed.
When the switch is pressed, the corresponding indicator will light.

* Normally, the switch is kept at a position where the indicator remains off.

8 COLOR Switches

These switches are used to select the background color when the color wiping or color fader function is used. When any of the switches is pressed, the corresponding indicator lights up and when it is pressed again, it will go off.

Eight colors — R (red), G (green), B (blue), M (magenta), C (cyan), Y (yellow), W (white) and B (black) — can be selected by using the three R, G and B switches in combination.

Refer to the panel markings for the operation of the switches.

* When the unit's power is turned on, all three indicators remain off and setting is made to "black."

9 VIDEO FADE/WIPE/MIX Controls and Switches

Adjust these switches and controls when the color wiping or color fading function is to be used.

WIPE/MIX PATTERN Switches: Use these switches to select a pattern when adding the color wiping effect. When any of the switches is pressed, the corresponding indicator lights up and the selected pattern is indicated.

* A circular pattern (◉) is set when the power is turned on. Use the WIPE ANGLE control to adjust the pattern on the screen to a circular pattern.
* This switch cannot be selected unless video signals are supplied to the unit.
* Select the pattern to be mixed using these switches when a professional-use camera with a gen-lock function is connected and two pictures are to be mixed.

WIPE ON Switch/FADER ON Switch: These switches are used to select the wiping or fader function, respectively.
When pressed, the corresponding indicator lights up to indicate that the function is ready for use.

* The two functions cannot be used at the same time.

NOR/REV Switch (Normal/Reverse): When this switch is pressed during color wiping, the indicator will light, and the picture section and wipe pattern section will change places. When it is pressed again, the indicator will go off and both the picture and wipe pattern will be restored to the original state.
When the switch is pressed while the fader function is being used, the fade-in and fade-out operations will be reversed, and when a picture is on the screen, it will appear in the background color.

* By pressing the NOR/REV switch during a mix wipe operation, the picture will switch from video program source A to B, or vice-versa.

POSITIONER/FADER Control: When the WIPE ON switch has been pressed, this control functions as the POSITION control, and it can be used to adjust the position and size of the wipe pattern.
When the FADER ON switch has been pressed, the control functions as the FADER control, and picture fade-in and fade-out can be performed.

* Adjust the mixing wipe using this control when a professional-use camera with a gen-lock function is connexted and two pictures are to be mixed.

SLANT ON Switch: When this switch is pressed, the corresponding indicator lights up and, by adjusting the WIPE ANGLE control, diagonal variations can be added to the wipe pattern, and a triangular or diamond-shaped wipe pattern can be produced.
When the switch is pressed again, the slanting function is released and the indicator goes off.

* An oval-shaped wiping effect can be produced using the WIPE ANGLE control even when this switch is OFF.

WIPE ANGLE Control: When this control is adjusted while the SLANT indicator is lighted, the wipe pattern can be changed to the diagonal direction.

10 SOFTNESS Control

When this control is adjusted during color wiping, the edges of the wipe pattern can be softened or hardened.

* When the control is set to SOFT, vertical stripes may appear on the picture. This is normal and is not indicative of a failure or malfunction in the unit.

11 EXT. PROCESSOR Terminals

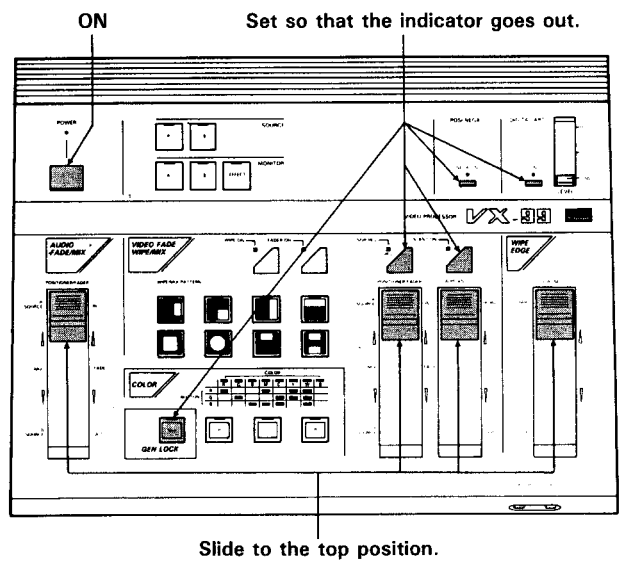
Connecting a character generator or a personal computer provided with a superimposing function to these terminals enables letters for titles, for instance, to be superimposed on the picture.

* Note that when the character generator is connected to the EXT. PROCESSOR terminal, a picture will not be obtained unless the character generator is switched ON.

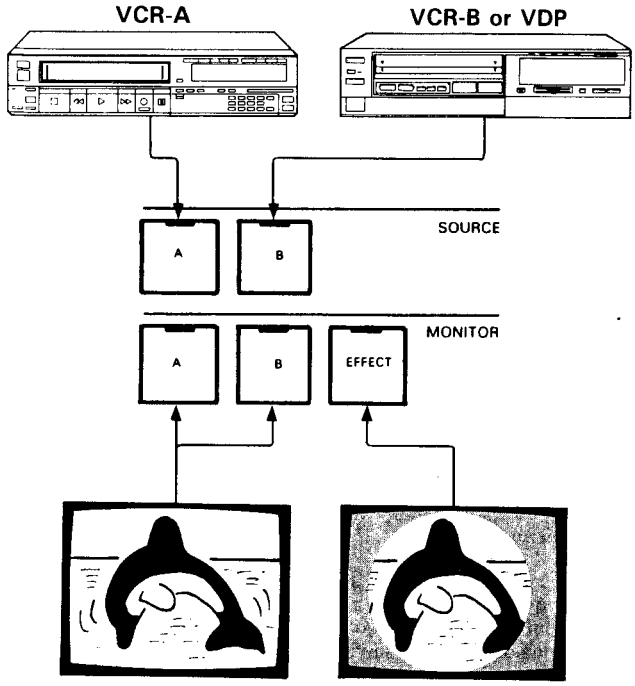
Operating procedures

Before operation

Set the various controls and switches as shown below.



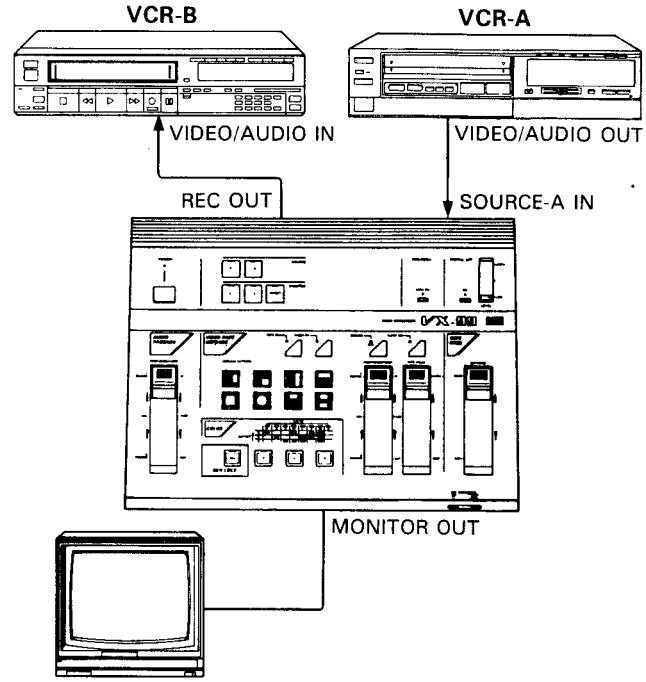
VCR or VDP playback



1. Press the "A" or "B" SOURCE switch, depending on the connections of the VCR or VDP whose program is to be played back.
2. Operate the VCR or VDP to play back the program.
3. When the "A" or "B" MONITOR switch is pressed and the video monitor is operated, the pictures without any of the effects added by this unit can be monitored.
4. When the EFFECT switch has been pressed, pictures with the effects added by this unit can be monitored.

Tape copying from VCR-A to B

Connect as shown in the connections figure for copying from VCR-A to B.



1. Press the "A" SOURCE switch and operate the VCR-A to play back the program.
2. Set the INPUT SELECTOR on VCR-B to AUX and prepare for recording.
3. Start the VCR-B recording at the start of the program which is to be recorded.
4. When this unit is operated, the program with the effects added by the unit can be copied.
   For information on how to add the various effects, refer to the details below.

Using the audio fade functions

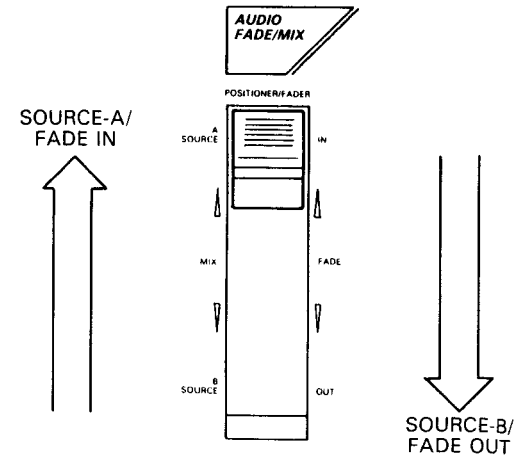
The sound can be gradually faded in or faded out.

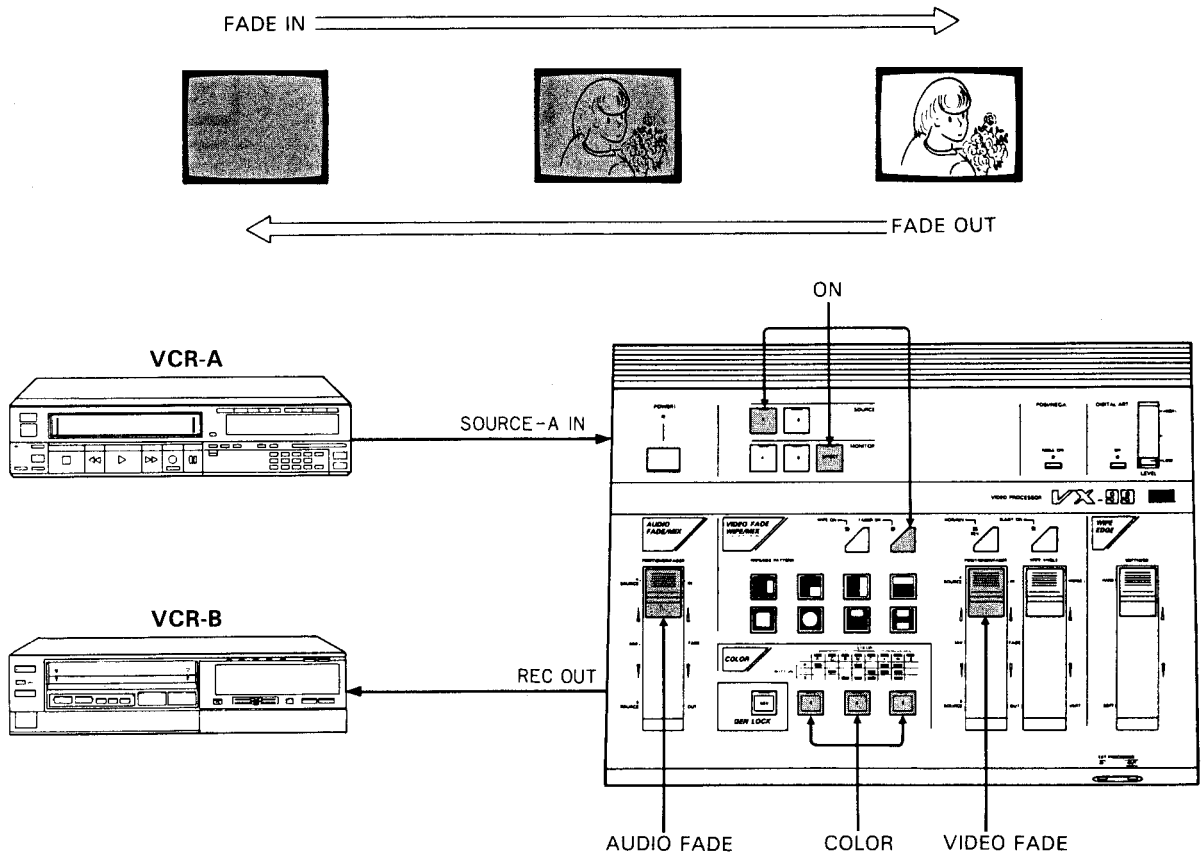
1. The sound is faded in gradually by playing back the program source and by sliding the AUDIO/MIX control slowly from bottom to top.
2. The sound can be faded out gradually by sliding the AUDIO FADE/MIX control slowly from top to bottom.

Audio mixing

When two program sources, "A" and "B," are played back and the AUDIO FADE/MIX control is slid to its midway point, the sound of both programs can be mixed. When the control is slid to the top position, the sound of "A" is heard; when it is slid to the bottom position, the sound of "B" is heard.

* Press the MIX switch and light up the indicator.



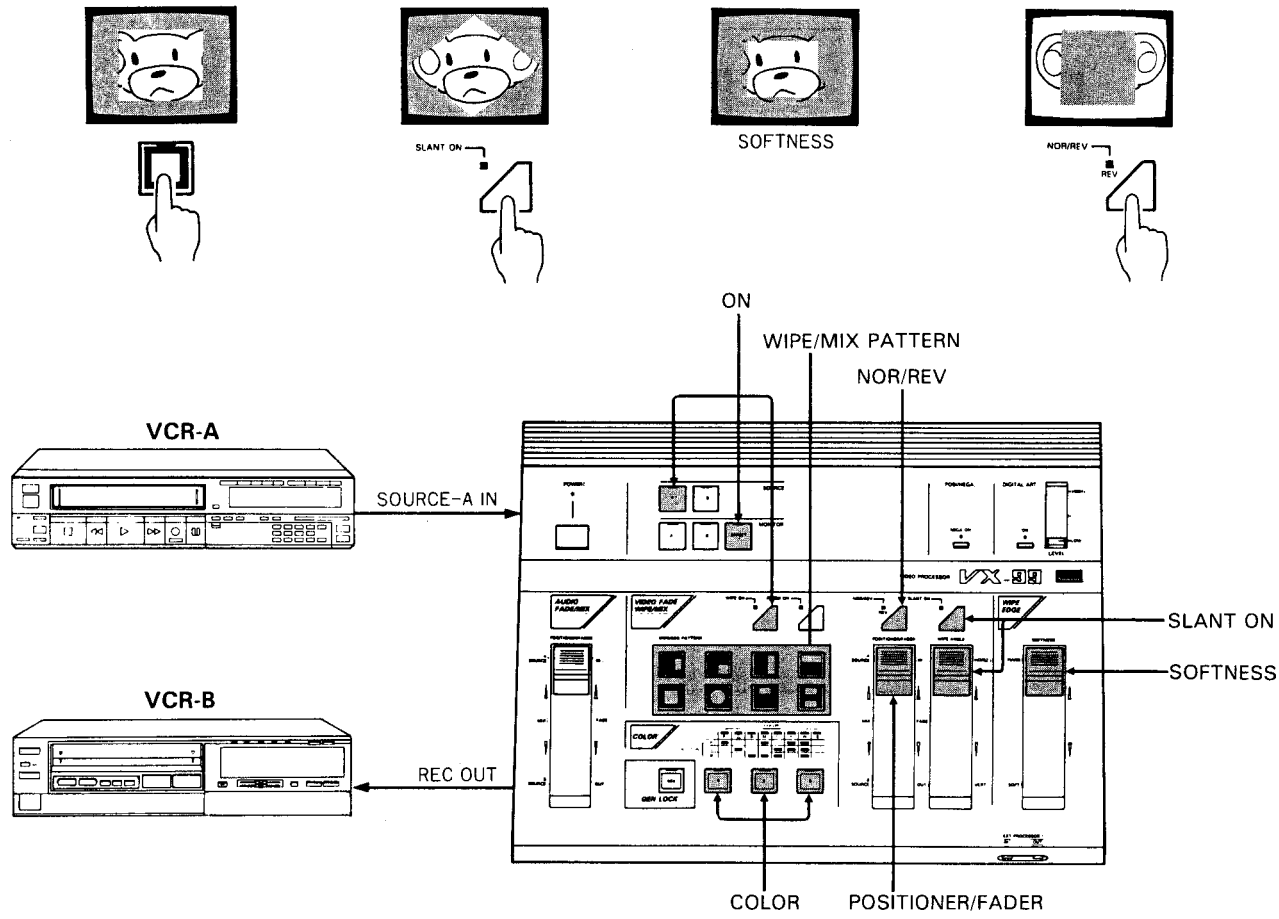


Color fade function

Example: Starting the copying with a white picture fade-in and fading out to a blue picture

1. Press the "A" SOURCE switch and the "EFFECT" MONITOR switch.
2. Press the FADER ON switch and light up the indicator.
3. Press the "R," "G" and "B" COLOR switches and light up the corresponding indicators.
4. Slide the POSITIONER/FADER control to the bottom position. To fade in or out the sound simultaneously, operate the AUDIO FADE/MIX control at the same time.
5. Start the VCR-A playback and the VCR-B recording. A white picture will now appear on the video monitor.
6. When the POSITIONER/FADER control is now slid gradually to the top position, the picture is gradually faded in on the screen.
7. Press the "R" and "G" COLOR switches and light up the "B" indicator.
8. Sliding the FADER control gradually to its bottom position at the place where the picture is to be faded out results in a fade-out into a blue picture.
9. Stop or temporarily stop VCR-B.
   To start copying again with a fade-in, press the "A" MONITOR switch to monitor the VCR-A pictures. Start the VCR-B recording at the place where the program is to be copied and slide the POSITIONER/FADER control gradually to the top position.

* Variations in the color may occur during playback when a single background color is recorded onto the VCR but this is caused by the performance of the VCR itself and is unavoidable.



Color wiping

The color wiping function allows the picture to be trimmed with various patterns or it can produce an effect similar to a stage curtain being raised over the start or lowered onto end of a particular scene. Any one of eight colors can be selected. Proceed as below.

1. Play back VCR-A or B.
2. Press the WIPE ON switch and light up the indicator.
3. Press one of the WIPE/MIX PATTERN switches to select a wipe pattern.
4. When the POSITIONER/FADER control is slid from the top to bottom position, the selected wipe pattern will appear and its size can be controlled in various ways.
   (Refer to the wipe patterns.)
5. Select the desired wipe color using the COLOR switches (R, G, B). (Refer to the details on how to select the colors.)
6. When the SLANT ON switch is pressed and its indicator lights and when the WIPE ANGLE control is adjusted, the wipe pattern can be changed to a diagonal direction.
7. When the SOFTNESS control is adjusted, the wipe pattern contours can be made soft or hard.
8. When the NOR/REV switch is pressed and its indicator lights, the wipe pattern and picture can be reversed.

* For copying, proceed to operate in combination with the above steps.

How to select the colors

Eight colors can be selected using the "R," "G" and "B" switches in combination for color wiping or color fading.

	□ — ON ■ — OFF R	G	B
Red	□	■	■
Green	■	□	■
Blue	■	■	□
Magenta	□	■	□
Cyan	■	□	□
Yellow	□	□	■
White	□	□	□
Black	■	■	■

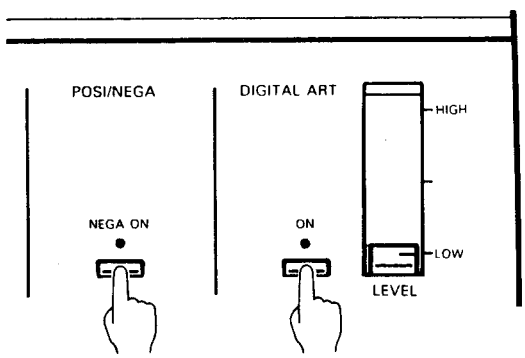
POSI/NEGA function

When the NEGA ON switch is pressed and its indicator is lighted, the normal picture is reversed into a negative picture and fantastic effects can be produced.
This function can be used in combination with the digital art or color wiping function.

Digital art function

When the DIGITAL ART switch is pressed and its indicator is lighted and when the level control is adjusted, a digital effect can be added to the picture so that it changes into something resembling an oil painting.

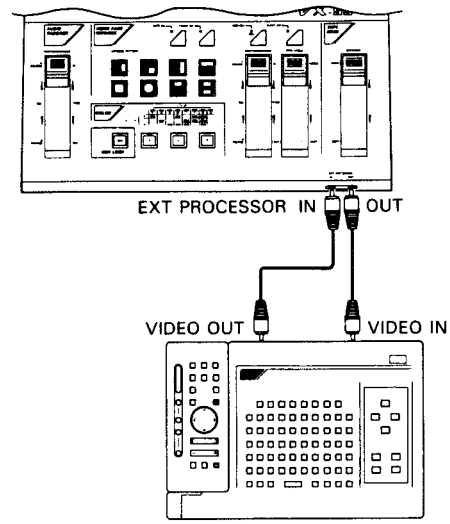
* This function can be used in combination with the NEGA function and wipe function.
* The color fader function can also be used to add a slight clolor effect and the digital art effect can be enhanced.



EXT. PROCESSOR Terminals

Connecting a character generator to these terminals enables letters for titles, for instance, to be superimposed on the picture.

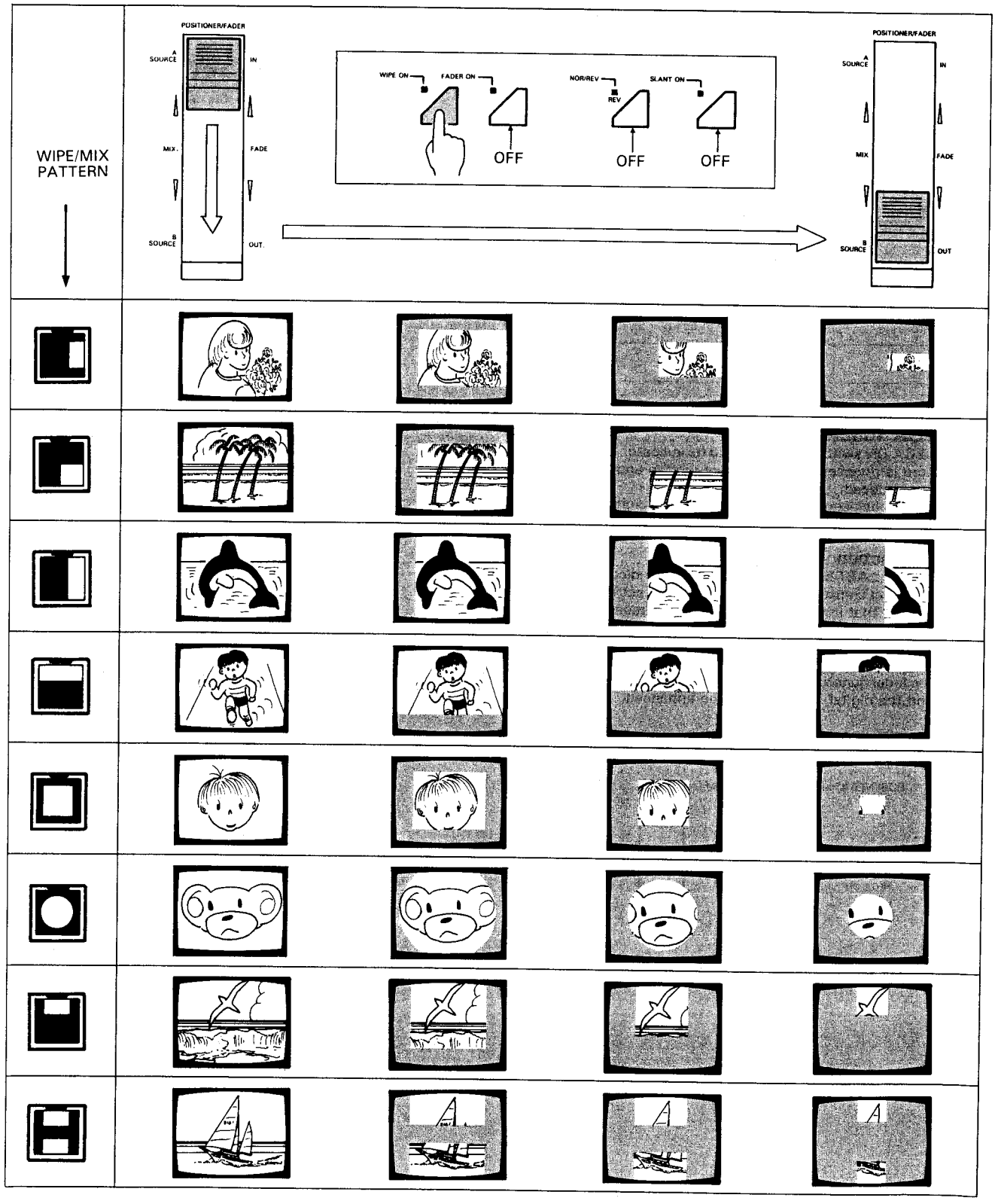
* Note that when the character generator is connected to the EXT. PROCESSOR terminal, a picture will not be obtained unless the character generator is switched ON.

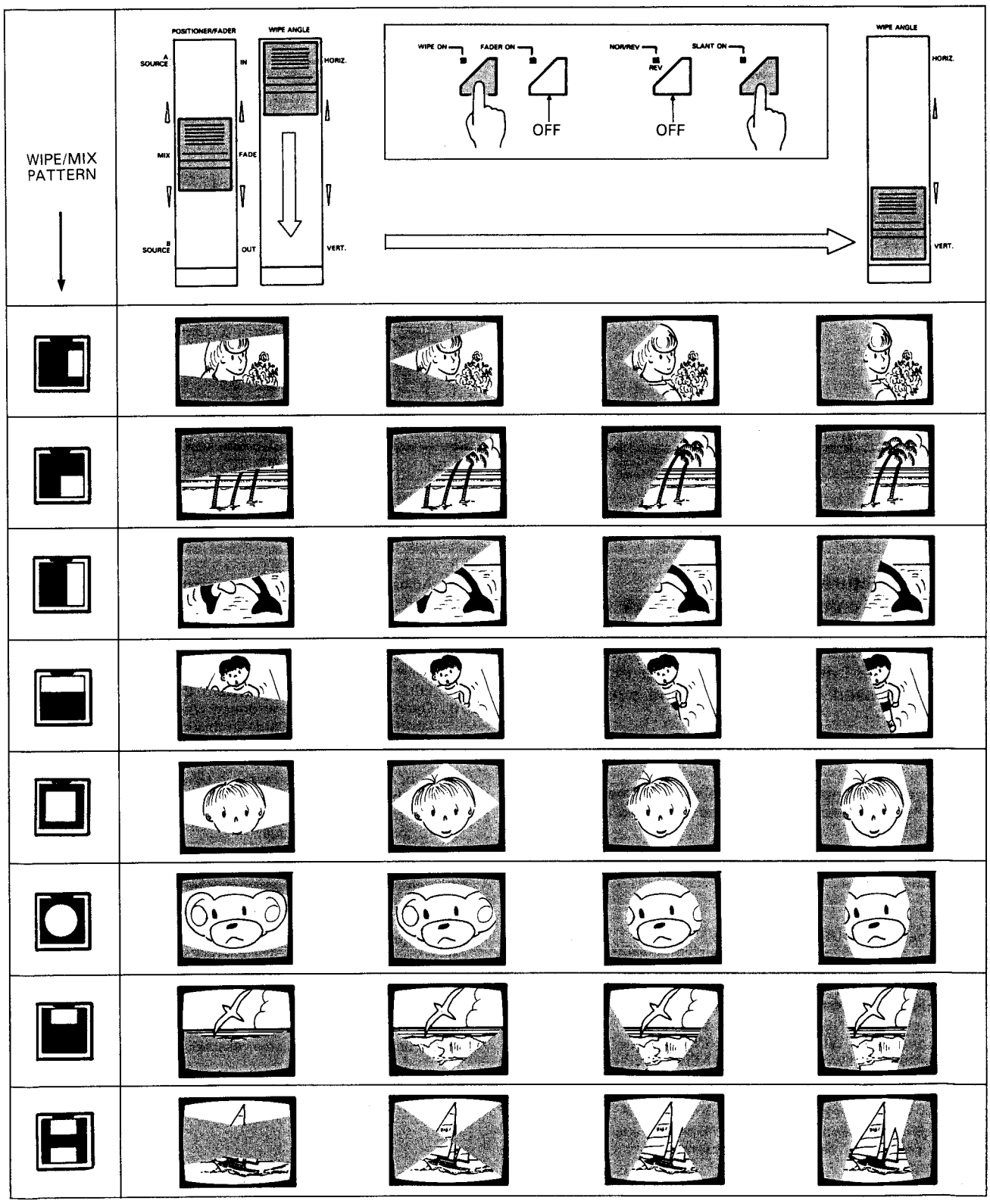


Wipe patterns

The following types of wipe patterns can be created and both wipe-in and wipe-out operations can be performed.

* Create the ◉ pattern by adjusting the WIPE ANGLE control.

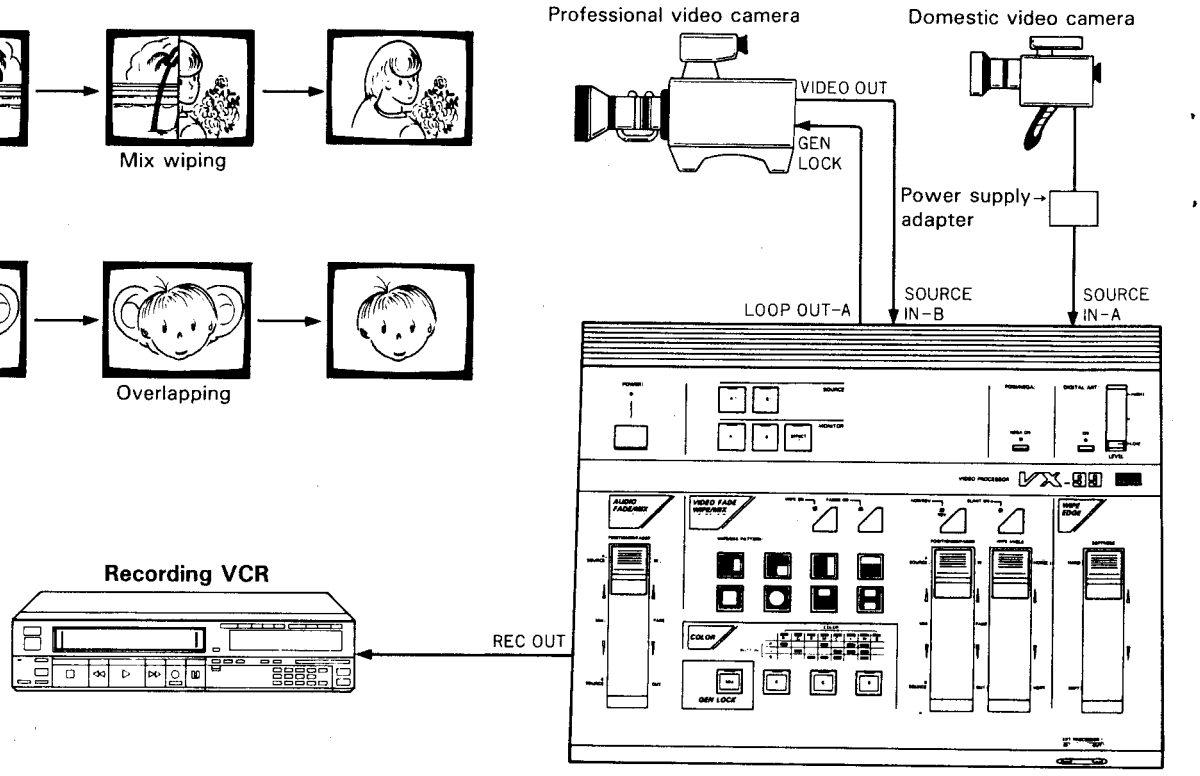



WIPE/MIX PATTERN
POSITIONER/FADER
WIPE ANGLE
A SOURCE
B SOURCE
IN
MIX
FADE
OUT
HORIZ.
VERT.
WIPE ON
FADER ON
NOR/REV
REV
SLANT ON
OFF
OFF
WIPE ANGLE
HORIZ.
VERT.

Connections for performing mix wipe/fading by combining two cameras

Mix wiping

Overlapping



Mixing two pictures (Using a video camera with a gen-lock function)

A professional-use type of video camera equipped with a gen-lock function is required for mixing the two pictures used for mix wiping and overlapping operations.
Mixing is not possible without this function.

Mix wiping or overlapping using two video cameras

Establish the gen-lock status between the two video cameras, as shown in the figure.

* Even a home-use video camera can be used as one of the two video cameras but the other camera must have a gen-lock function.

Operation

1. Press the "A" SOURCE switch.
   Source A serves as the reference signal with these connections. (Source B can also be made to serve as the reference signal.)
2. Press the WIPE ON switch.
3. Press the MIX switch and light up the indicator.
4. Slide the POSITIONER/FADER control upward.
5. Select one of the WIPE/MIX PATTERN switches to select the wipe pattern, and when the POSITIONER/FADER control is slid downward, the two pictures which have been divided into the wipe pattern appear on the screen.
6. Use the source A color to adjust the subcarrier phase of the source B camera, and align the A and B picture qualities. (Refer to the section on adjusting the picture quality between the cameras.)

* Note that if the "B" SOURCE switch is pressed, the color tone will change.

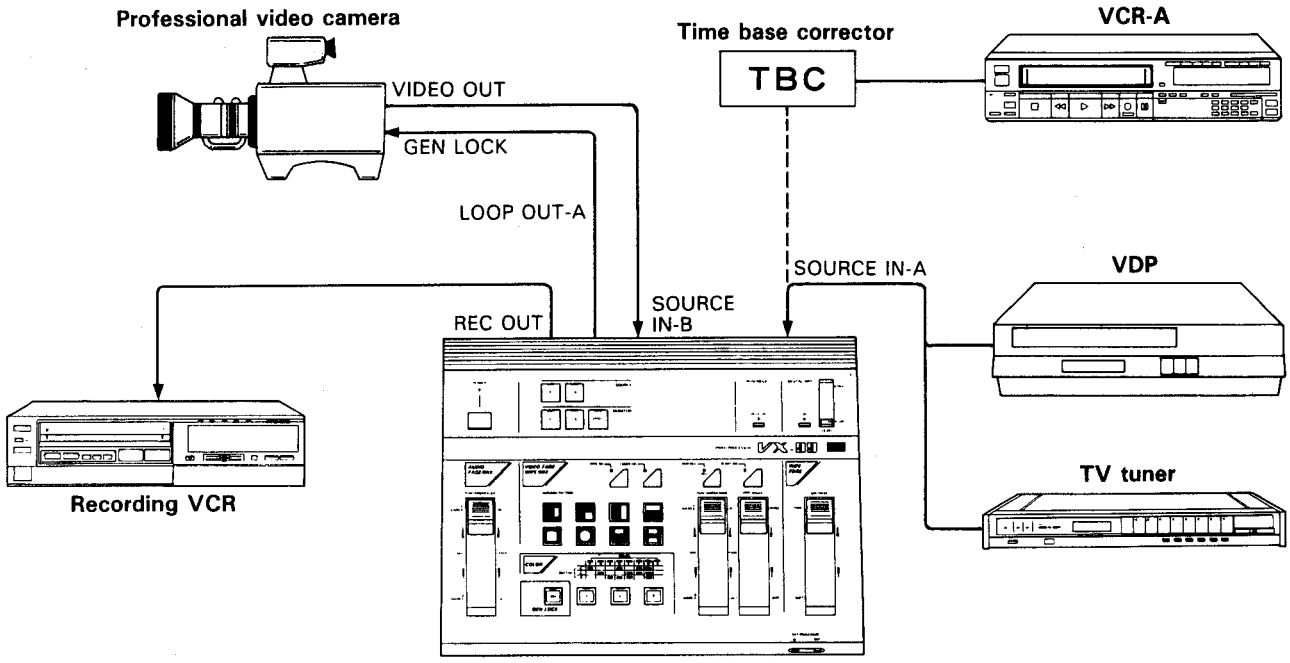
7. Adjust the mix wipe pattern using the POSITIONER/FADER control. When the SLANT ON switch is pressed and the WIPE ANGLE control is adjusted, various forms of mix wiping can be enjoyed.
8. When the FADER ON switch is pressed, the wipe function is switched over to the overlap function. When the POSITIONER/FADER control is slid upward, the source A picture appears.
9. Overlapping can be performed when the POSITIONER/FADER control is slid downward: in this case, the A picture gradually disappears and is replaced by the B picture.
   When the same control is slid from the bottom to the top position, the B picture is replaced by the A picture.
10. When the POSITIONER/FADER control is placed midway between the top and bottom positions, the A and B pictures are mixed to form a double image.

Adjusting the picture quality between the cameras

This unit is not provided with a color tone adjustment function. For this reason, when using two or more cameras simultaneously, it is necessary to perform adjustment at the camera side.
When two video cameras are to be used at the same time, use one camera as a reference when adjusting the other so that the picture quality will not vary between the two cameras.
First, adjust coarsely using the subcarrier (SC) selector switch and then rotate the SC PHASE adjustment screw to adjust finely. Adjustment will be facilitated by the use of a vectorscope but when such an instrument is not available, use skin color as the reference.

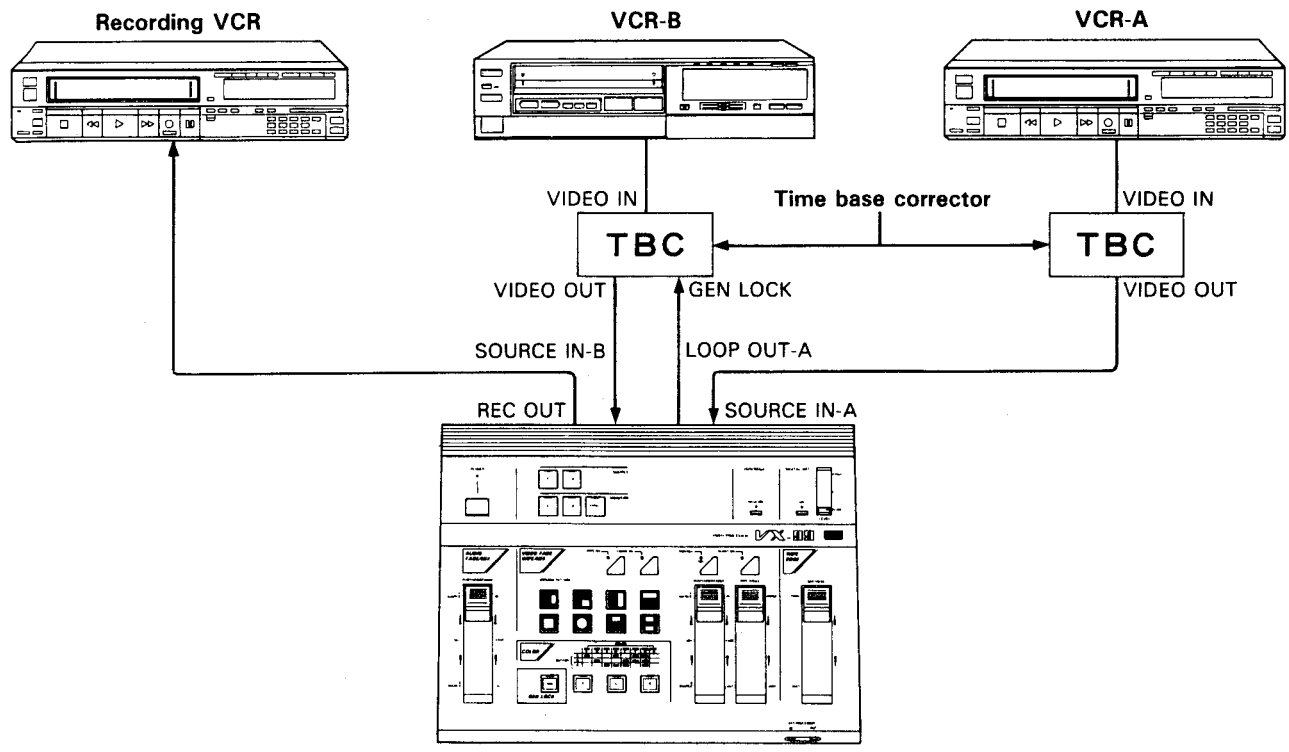
Connections for performing mix wipe/fading by combining the camera with a VDP or television tuner

Make the same connections as those shown in the figure and, using the TV broadcast signal as a reference, provide gen-lock using the video camera which is equipped with the gen-lock function.



Connections for performing mix wipe/fading by combining two VCRs with two TBC

* It is not possible to use the LOOP OUT-A terminal simultaneously with the LOOP OUT-B terminal.
Be sure to use only one terminal at a time.



Gen-lock

Gen-lock refers to the use of the video camera, TV broadcast or VDP sync signal to adjust the phase and frequency of another video camera's sync signal.

* Due to the high degree of jitter and fluctuating video signals produced by a VCR, any attempt to conduct mix wiping even in combination with a video camera featuring a gen-lock function will result in a disturbed picture.
  Two time base correctors (TBC) are required to mix the pictures of a VCR and home-use video camera which is not provided with a gen-lock function.
* When performing mix wipe or fading of the pictures obtained from a VCR and a camera provided with a GEN LOCK, one TBC (time base corrector) is necessary.

Checkpoints for proper use of video processor

The following symptoms are quite normal and are not indicative of a failure or malfunction in the unit.

* The picture may be disturbed if a video tape, onto which programs have been repeatedly copied, is monitored in one of the unit's effect modes.
* The sync signal will deteriorate when the VCR tape is fast forwarded, searched or set to the still picture mode, and so the picture may be disturbed if it is monitored in one of the unit's effect modes.
* The sync signal will fluctuate when a sudden change is made from a dark location to a bright location, and so the picture may be disturbed as a result.
* If a monochrome signal without the burst signal is supplied, the unit's background color will not function normally.

Specifications

VIDEO INPUT sensitivity/Impedance
..... 1.0 Vp-p/75 ohms
VIDEO OUTPUT level/Impedance
..... 1.0 Vp-p/75 ohms
AUDIO INPUT sensitivity/Impedance
..... −6 dBs/47 kohms
AUDIO OUTPUT level/Impedance
..... −6 dBs/10 kohms
Frequency response
VIDEO IN→MONITOR OUT ..... 5 Hz~7 MHz, ±2 dB
AUDIO IN→MONITOR OUT ..... 20 Hz~100 kHz −3 dB

Others

Power requirements 220/240V
50/60 Hz
For Saudi Arabia 127/220V
Power consumption ..... 20 watts Rated
Dimensions ..... 360 mm (14-3/16")W
103 mm (4-1/16")H
280 mm (11-1/16")D
Weight ..... 3.0 kg (6.6 lbs) net
4.0 kg (8.8 lbs) packed

* **Design and specifications subject to changes without notice for improvements.**
* **Due to local laws and regulations, this unit sold in some areas are not equipped with variable voltage selectors**